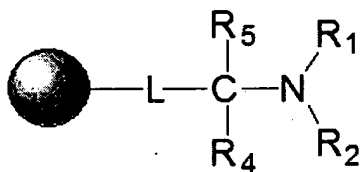


Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) Process for generating a metal complexed agent, comprising:
- contacting ~~(I)~~ a solid phase bound organic conjugate represented by ~~the~~ formula (I) with $[M(H_2O)_3(CO)_3]^{n+}$,



(I)

wherein:

the sphere is ~~the~~ a solid phase support;

C is a methylene group ~~that may be substituted by one or two groups~~;

R₄ and R₅, ~~which can be in particular~~ are independently selected from the group consisting of H, aliphatic substituents, or aromatic substituents, or RO, RS ~~or~~ and (R)₂N, wherein R is an aliphatic or aryl group;

L is a linker or a single bond ~~that may or may not be present, that is coupled to the solid support and has activating properties towards nucleophilic attack to the C group and is preferably a phenyl, alkyl, allyl or aryl~~; and

each of R₁ and R₂ are the same or different and are independently a metal coordinating group, or a non-coordinating organic group, a metal coordinating group derivatized with a biologically active molecule, or a non-coordinating organic group which solid phase bound organic conjugate is optionally derivatized at one or both of R₁ and R₂ with a biologically active molecule; with (II) $[M(H_2O)_3(CO)_3]^{n+}$,

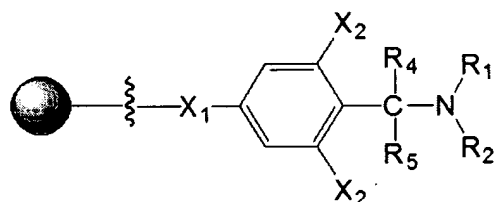
wherein M is selected from the group consisting of technetium (Tc), rhenium (Re), rhodium (Rh), platinum (Pt), iridium (Ir), ruthenium (Ru), and copper (Cu); and

-n is 1, 2 or 3 ~~depending on the metal; under suitable conditions to cause the formation of a coordinate bond between $[M(H_2O)_3(CO)_3]^{n+}$ and the tertiary amine nitrogen atom of the solid phase bound organic conjugate and thereby the release of the metal complexed agent thus formed from the support.~~

2. (Currently Amended) Process according to claim 1, wherein ~~the~~ L is a linker is selected from the group consisting of phenyl, vinyl, alkyl, allyl, aryl, and other non-aliphatic and aliphatic groups.

3. (Currently Amended) Process according to claim 2, wherein ~~the phenyl, vinyl, aryl or other non-aliphatic and aliphatic groups are~~ L is substituted with an electron withdrawing group selected from OR, R₅, and N(R)₂, wherein R is an aliphatic or aryl group.

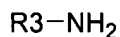
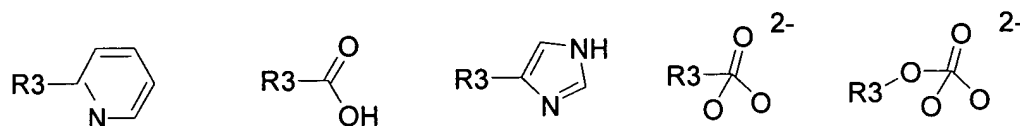
4. (Currently Amended) Process according to claims 12, wherein ~~the linker~~ L is as shown in formula II:



(II)

wherein X₁ is C or O, and each of X₂ is an electron withdrawing substituents and preferably a -OCH₃ group.

5. (Currently Amended) Process according to claim 1, wherein at least one of R₁ and/or R₂ are is selected from the group consisting of



wherein R₃ is a tertiary amine, or an aliphatic chain containing 1, 2 or 3 carbons.

6. (Currently Amended) Process according to claim 1, wherein at least one of R₁ and R₂ are ~~is an~~ aliphatic or aromatic substituent, ~~such as CH₃, C₂H₅ or CH₂C₆H₅.~~

7. (Currently Amended) Process according to claim 1, ~~wherein M is selected from the group consisting of Tc, Re, Ru, Rh, Ir, Cu and Pt~~ further comprising forming a coordinate bond between [M(H₂O)₃(CO)₃]ⁿ⁺ and a tertiary amine nitrogen atom of the solid phase bound organic conjugate, and releasing a metal complexed agent thus formed.

8. (Currently Amended) Process ~~as claimed in~~ according to claim 71, wherein the ~~metal~~ M is selected from the group consisting of ^{99m}Tc, ¹⁸⁶Re and ¹⁸⁸Re.

9. (Currently Amended) Process according to claim 1, wherein the biologically active molecule is selected from the group consisting of amino acids, ~~steroids, peptides, proteins, in particular structural proteins, enzymes or antibodies,~~ carbohydrates, ~~polysaccharides, and oligosaccharides,~~ nucleosides, ~~nucleotides, oligonucleotides, and polynucleotides,~~ lipids, ~~peptides and pharmaceutically active small molecules such as central nervous system receptor binding compounds.~~

10. (Currently Amended) Process according to claim 1, wherein the solid phase support is a polyethylene glycol resin, or a hybrid of polyethylene glycol and polystyrene, ~~e. g. a polystyrene resin with polyethylene glycol spacers with a benzyl alcohol anchoring group.~~

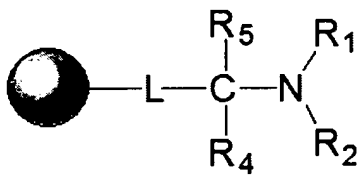
11. (Cancelled).

12. (Currently Amended) Process according to claim 1, wherein the process is performed at a pH that is in the range of about 6.0-11.0, ~~preferably in the range of about 7.5-9.5.~~

13. (Currently Amended) Process according to claim 1, wherein the process is performed at a temperature in the range of about 40-100 C, ~~preferably in the range of about 70-82 C.~~

14. (Cancelled).

15. (Currently Amended) A solid phase bound organic conjugate represented by the formula (I)



(I)

wherein the sphere is a solid phase support;

C is a methylene group;

R₄ and R₅ are independently selected from the group consisting of H, aliphatic substituents, aromatic substituents, RO, RS and (R)₂N, wherein R is an aliphatic or aryl group;

L is a linker or a single bond; and

each of R₁ and R₂ is independently a metal coordinating group, a non-coordinating organic group, a metal coordinating group derivatized with a biologically active molecule, or a non-coordinating organic group derivatized with a biologically active molecule~~L, C, R₁, R₂, R₄ and R₅ are as defined in claim 1.~~

16. (Currently Amended) A solid phase bound organic ~~molecule-conjugate~~ according to claim 15, ~~characterized in that~~wherein the biologically active molecule is selected from the group consisting of amino acids, steroids, peptides, proteins, ~~in particular structural proteins, enzymes or antibodies;~~ carbohydrates, polysaccharides, and oligosaccharides, nucleosides, nucleotides, oligonucleotides, and polynucleotides, lipids, ~~peptides~~ and pharmaceutically active small molecules ~~such as central nervous system receptor binding compounds.~~

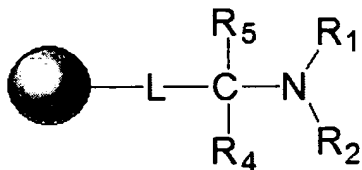
17. (Currently Amended) A solid phase bound organic ~~molecule-conjugate~~ according to claim 15, wherein the solid phase support is a polyethylene glycol resin; or a hybrid of polyethylene glycol and polystyrene, ~~e.g. a polystyrene resin with polyethylene glycol spacers with a benzyl alcohol anchoring group.~~

18-19. (Cancelled).

20. (Currently Amended) A kit for the preparation of a diagnostic or therapeutic pharmaceutical composition, the kit comprising:

-a container; and

~~with the~~ a molecule of formula (I),



(I)

wherein the sphere is a solid phase;

C is a methylene group;

R₄ and R₅ are independently selected from the group consisting of H, aliphatic substituents, aromatic substituents, RO, RS and (R)₂N, wherein R is an aliphatic or aryl group;

L is a linker or a single bond; and

each of R₁ and R₂ is independently a metal coordinating group, a non-coordinating organic group, a metal coordinating group derivatized with a biologically active molecule, or a non-coordinating organic group derivatized with a biologically active molecule.

in which the reaction with a solution of [M(H₂O)₃(CO)₃]ⁿ⁺ can take place.

21. (Original) Kit as claimed in claim 20, wherein the container is a vessel or column.

22. (Currently Amended) Kit as claimed in claim 20, further comprising a solution of [M(H₂O)₃(CO)₃]ⁿ⁺, wherein M is a metal, and n is 1, 2 or 3.

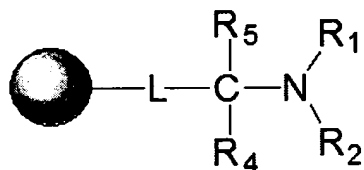
23. (Currently Amended) Kit as claimed in claim 20, further comprising ~~the~~ reagents for the preparation of ~~the metal carbonyl~~ [M(H₂O)₃(CO)₃]ⁿ⁺, wherein M is a metal, and n is 1, 2 or 3.

24. (Original) Kit as claimed in claim 20, further comprising a facility for filtration.

Clean Listing of Claims:

1. (Currently Amended) Process for generating a metal complexed agent, comprising:

contacting a solid phase bound organic conjugate represented by formula (I) with $[M(H_2O)_3(CO)_3]^{n+}$,



(I)

wherein:

the sphere is a solid phase support;

C is a methylene group;

R₄ and R₅ are independently selected from the group consisting of H, aliphatic substituents, aromatic substituents, RO, RS and (R)₂N, wherein R is an aliphatic or aryl group;

L is a linker or a single bond; and

each of R₁ and R₂ is independently a metal coordinating group, a non-coordinating organic group, a metal coordinating group derivatized with a biologically active molecule, or a non-coordinating organic group derivatized with a biologically active molecule,

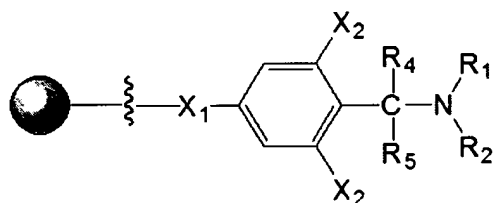
wherein M is selected from the group consisting of technetium (Tc), rhenium (Re), rhodium (Rh), platinum (Pt), iridium (Ir), ruthenium (Ru), and copper (Cu); and

n is 1, 2 or 3.

2. (Currently Amended) Process according to claim 1, wherein L is a linker selected from the group consisting of phenyl, vinyl, alkyl, allyl, aryl, and other non-aliphatic and aliphatic groups.

3. (Currently Amended) Process according to claim 2, wherein L is substituted with an electron withdrawing group selected from OR, R and N(R)₂, wherein R is an aliphatic or aryl group.

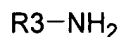
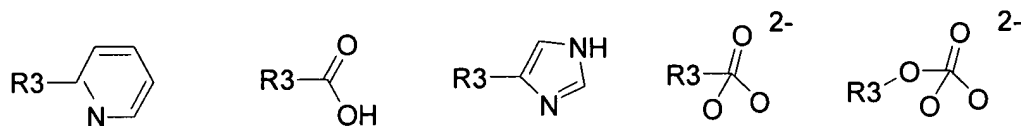
4. (Currently Amended) Process according to claim 1, wherein L is as shown in formula II:



(II)

wherein X₁ is C or O, and each of X₂ is an electron withdrawing substituent.

5. (Currently Amended) Process according to claim 1, wherein at least one of R₁ and R₂ is selected from the group consisting of



wherein R₃ is a tertiary amine, or an aliphatic chain containing 1, 2 or 3 carbons.

6. (Currently Amended) Process according to claim 1, wherein at least one of R₁ and R₂ is an aliphatic or aromatic substituent.

7. (Currently Amended) Process according to claim 1, further comprising forming a coordinate bond between [M(H₂O)₃(CO)₃]ⁿ⁺ and a tertiary amine nitrogen atom of the solid phase bound organic conjugate, and releasing a metal complexed agent thus formed.

8. (Currently Amended) Process according to claim 1, wherein M is selected from the group consisting of ^{99m}Tc, ¹⁸⁶Re and ¹⁸⁸Re.

9. (Currently Amended) Process according to claim 1, wherein the biologically active molecule is selected from the group consisting of amino acids, steroids, peptides, proteins, carbohydrates, polysaccharides, oligosaccharides, nucleosides, nucleotides, oligonucleotides, polynucleotides, lipids, and pharmaceutically active small molecules.

10. (Currently Amended) Process according to claim 1, wherein the solid phase support is a polyethylene glycol resin or a hybrid of polyethylene glycol and polystyrene.

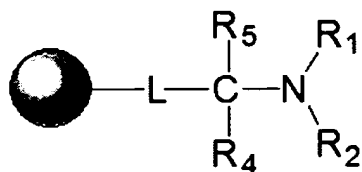
11. (Cancelled).

12. (Currently Amended) Process according to claim 1, wherein the process is performed at a pH that is in the range of about 6.0-11.0.

13. (Currently Amended) Process according to claim 1, wherein the process is performed at a temperature in the range of about 40-100 C.

14. (Cancelled).

15. (Currently Amended) A solid phase bound organic conjugate represented by formula (I)



(I)

wherein the sphere is a solid phase support;

C is a methylene group;

R₄ and R₅ are independently selected from the group consisting of H, aliphatic substituents, aromatic substituents, RO, RS and (R)₂N, wherein R is an aliphatic or aryl group;

L is a linker or a single bond; and

each of R₁ and R₂ is independently a metal coordinating group, a non-coordinating organic group, a metal coordinating group derivatized with a biologically active molecule, or a non-coordinating organic group derivatized with a biologically active molecule.

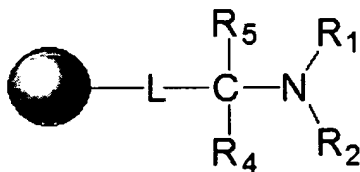
16. (Currently Amended) A solid phase bound organic conjugate according to claim 15, wherein the biologically active molecule is selected from the group consisting of amino acids, steroids, peptides, proteins, carbohydrates, polysaccharides, oligosaccharides, nucleosides, nucleotides, oligonucleotides, polynucleotides, lipids, and pharmaceutically active small molecules.

17. (Currently Amended) A solid phase bound organic conjugate according to claim 15, wherein the solid phase support is a polyethylene glycol resin or a hybrid of polyethylene glycol and polystyrene.

18-19. (Cancelled).

20. (Currently Amended) A kit for the preparation of a diagnostic or therapeutic pharmaceutical composition, the kit comprising:
a container; and

a molecule of formula (I),



(I)

wherein the sphere is a solid phase;

C is a methylene group;

R₄ and R₅ are independently selected from the group consisting of H, aliphatic substituents, aromatic substituents, RO, RS and (R)₂N, wherein R is an aliphatic or aryl group;

L is a linker or a single bond; and

each of R₁ and R₂ is independently a metal coordinating group, a non-coordinating organic group, a metal coordinating group derivatized with a biologically active molecule, or a non-coordinating organic group derivatized with a biologically active molecule.

in which the reaction with a solution of [M(H₂O)₃(CO)₃]ⁿ⁺ can take place.

21. (Original) Kit as claimed in claim 20, wherein the container is a vessel or column.

22. (Currently Amended) Kit as claimed in claim 20, further comprising a solution of [M(H₂O)₃(CO)₃]ⁿ⁺, wherein M is a metal, and n is 1, 2 or 3.

23. (Currently Amended) Kit as claimed in claim 20, further comprising reagents for preparation of [M(H₂O)₃(CO)₃]ⁿ⁺, wherein M is a metal, and n is 1, 2 or 3.

24. (Original) Kit as claimed in claim 20, further comprising a facility for filtration.